REMARKS

Applicants request reconsideration of this application in view of the present Amendment. Claim 26 is amended to correct a typographical error.

I. Priority

A certified copy of German Application No. 100 28 875.8, filed June 6, 2000, from which priority is claimed in this case, is submitted herewith. A verified translation of German Application No. 100 28 875.8 is also submitted herewith.

II. Drawings

A replacement Fig. 1 providing textual descriptions of the steps is enclosed herewith. The textual descriptions used in Fig. 1 are provided in the specification at page 10, ¶¶ 60-66.

III. Specification

The first page of the specification is an unnecessary title page and is deleted above.

IV. 35 U.S.C. § 103(a)--Bunin

Applicants claim priority to German Application No. 100 28 875.8, which was filed June 6, 2000. Bunin Application Publication U.S. 2002/0049548 ("Bunin's Published Application"), which was filed April 2, 2001, claims priority to the following two United States Provisional applications ("Bunin Provisional Applications"):

- Provisional Application No. 60/194,338, which was filed on April 3, 2000, and
- Provisional Application No. 60/198,482, which was filed on April 18, 2000.

Because the Bunin Published Application was published after Applicants' priority document, material disclosed in the Bunin Published Application that is not supported by the Bunin Provisional Applications is not prior art. Only that which is disclosed in the Bunin Provisional Applications is prior art. Therefore, Applicants have studied the Bunin Provisional Applications to determine if the Bunin Provisional Applications teach or suggest the elements asserted in the Office Action to be taught or suggested by the Bunin Published Application. As the following remarks show, they do not. (For the Examiner's convenience, a copy of each Bunin Provisional Application is enclosed herewith.)

Claim 1 recites a method for the automated production and iterative automated optimization of a substance library including the step of defining at least one production parameter and at least one test parameter. The Bunin Provisional Applications do not teach or suggest defining at least one production parameter and at least one test parameter. Instead, they provide a software based tool that can provide predictive information. The Bunin Provisional Applications teach methods for gathering and organizing existing information, but do not teach the automated production and iterative automated optimization of a substance library. The Bunin Provisional Applications simply do not teach or suggest a method including the step of defining at least one production parameter and at least one test parameter for the automated production and iterative automated optimization of a substance library.

Claim 1 further recites the automated testing of the at least two substances of the substance library with respect to at least one performance characteristic on the basis of the at least one test parameter. The Bunin Provisional Applications do not teach or suggest this limitation of claim 1. As discussed above, the Bunin Provisional Applications disclose a software based predictive tool for storing and accessing information about chemical reactions. Because the system disclosed by the Bunin Provisional Applications is software based, i.e., virtual, no physical testing steps are taught or suggested within the prediction steps.

Claim 1 additionally recites varying the at least one production parameter and/or the at least one test parameter for optimizing the performance characteristics, to perform single or repeated iterations of steps b) to e) or c) to e). The Bunin Provisional Applications do not teach or suggest this limitation. In addition to the fact that the Bunin Provisional Applications do not teach or suggest the definition of a production parameter or a test parameter that could be varied based on actual test data, as discussed above, the Bunin Provisional Applications do not teach or suggest varying production parameters or test parameters. Further, as the system disclosed in the Bunin Provisional Applications is software based and does not teach physical testing within the prediction steps, he has no way of knowing the performance characteristics of a predicted molecule. Without any knowledge of the performance characteristics of a molecule, the system disclosed in the Bunin Provisional Application would have no basis upon which to optimize a performance characteristic.

Moreover, one of ordinary skill in the art would find no suggestion or motivation in the system taught by the Bunin Provisional Applications to automatically produce and iteratively optimize a substance library using the steps of claim 1. This is because the steps of claim 1 involve the determination of the actual properties of the components of the substance library. Once a person of ordinary skill has this real information there is no need for Bunin's computer predictions. The value of the system disclosed by the Bunin Provisional Applications is in providing access to information from outside sources that is otherwise unknown or unavailable to the user. That feature of the Bunin Provisional Applications is entirely different from the claimed invention, which processes information that the user already possesses. Consequently, the Bunin Provisional Applications neither teach nor suggest a method by which actual physical data are gathered for a particular substance library and by which the particular substance library is optimized based on the gathered physical data.

Claim 1 thus recites elements that are neither taught nor suggested by the Bunin Provisional Applications and, therefore, could not have been made obvious by the Bunin Provisional Applications under 35 U.S.C. § 103(a). Claims 2-18, which depend from claim 1, recite elements that distinguish the invention further from the disclosure of the Bunin Provisional Applications under 35 U.S.C. § 103(a).

Independent claim 19 recites an apparatus for the automated production and iterative automated optimization of a substance library including defining means for defining at least one initial production parameter and at least one test parameter; a test device that tests the at least two substances of the substance library with respect to at least one performance characteristic on the basis of the at least one test parameter; and a device for varying the at least one production parameter and/or test parameter for optimizing the performance characteristics.

As discussed above for claim 1, the Bunin Provisional Applications do not teach or suggest a method that relates to defining at least one production parameter and at least one test parameter; automated testing of the at least two substances of the substance library with respect to at least one performance characteristic on the basis of the at least one test parameter; or varying the at least one production parameter and/or the at least one test parameter for optimizing the performance characteristics, to perform single or repeated iterations of steps b) to e) or c) to e). An apparatus with means to perform these method steps, which are neither taught

nor suggested by the Bunin Provisional Applications, is equally remote from anything that is taught or suggested by the Bunin Provional Applications. Because claim 19 recites elements that are neither taught nor suggested by the Bunin Provisional Applications, it could not have been made obvious by the Bunin Provisional Applications under 35 U.S.C. § 103(a). Claim 20, which depends from claim 19, recites elements that distinguish the invention further from the disclosure of the Bunin Provisional Applications under 35 U.S.C. § 103(a).

Independent claim 21 recites a substrate comprising at least one substance library made by a method comprising steps including: defining at least one production parameter and at least one test parameter; automated testing of the at least two substances of the substance library with respect to at least one desired useful property on the basis of the at least one test parameter; and varying the at least one production parameter and/or the at least one test parameter for optimizing the desired useful properties, to perform single or repeated iterations of steps b) to e) or c) to e).

As discussed above for claim 1, the Bunin Provisional Applications do not teach or suggest a method that relates to defining at least one production parameter and at least one test parameter; automated testing of the at least two substances of the substance library with respect to at least one performance characteristic on the basis of the at least one test parameter; or varying the at least one production parameter and/or the at least one test parameter for optimizing the performance characteristics, to perform single or repeated iterations of steps b) to e) or c) to e). Creating a substance library by using these method steps, which are neither taught nor suggested by the Bunin Provisional Applications, is equally disparate from anything that is taught or suggested by the Bunin Provisional Applications. Because claim 21 recites elements that are neither taught nor suggested by the Bunin Provisional Applications, it could not have been made obvious by the Bunin Provisional Applications under 35 U.S.C. § 103(a).

Independent claim 22 recites a computer readable storage medium having computer program code recorded thereon executable by a computer, wherein the computer program code includes: a first program code for defining at least one production parameter and at least one test parameter; a third program code for automated testing of the at least two substances of the substance library with respect to at least one performance characteristic on the basis of the at least one test parameter; and a fifth program code that varies the at least one production

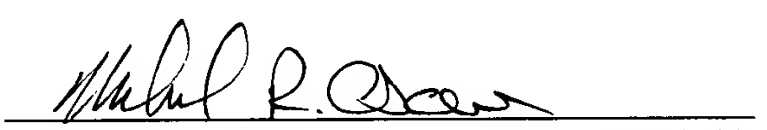
parameter and/or the at least one test parameter for optimizing the test characteristics and to perform single or repeated iterations of the first to fourth codes.

As discussed above for claim 1, the Bunin Provisional Applications do not teach or suggest a method that relates to defining at least one production parameter and at least one test parameter; automated testing of the at least two substances of the substance library with respect to at least one performance characteristic on the basis of the at least one test parameter; or varying the at least one production parameter and/or the at least one test parameter for optimizing the test characteristics and to perform single or repeated iterations. Controlling these method steps, which are neither taught nor suggested by the Bunin Provisional Applications, by a computer readable storage medium having computer program code recorded thereon executable by a computer is equally distinct from anything that is taught or suggested by the Bunin Provisional Patent Applications. Because claim 22 recites elements that are neither taught nor suggested by the Bunin Provisional Applications, it is not made obvious by the Bunin Provisional Applications under 35 U.S.C. § 103(a). Claims 23-32, which depend from claim 22, recite elements that distinguish the invention further from the disclosure of the Bunin Provisional Applications under 35 U.S.C. § 103(a).

V. Conclusion

For the reasons discussed above, Applicants respectfully submit that the application is in condition for allowance and allowance is requested.

Respectfully submitted,



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